

## Afghan Refugees in Iran Model Renal Transplantation Program: Ethical Considerations

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### ABSTRACT

During 23 years of civil war in Afghanistan, there has been a continuous flow of more than 5 million refugees out of the country. Iran has hosted about 40% of all refugees. The majority have resided outside of camps with opportunities to integrate locally, having access to the Iranian labor market and government services, such as dialysis and transplantation. Iran also has adopted a compensated living unrelated donor renal transplantation program in which foreigners can receive transplants from living related donors or volunteer living unrelated donors of the same nationality. In June 2004, among 241 refugees with end-stage kidney disease in Iran, 179 were on hemodialysis and 62 underwent renal transplantation. Nine patients received kidneys from living related donors, 1 from a spouse, 50 from Afghani living unrelated donors, and 1 from a cadaveric donor. No refugee had been used as a kidney donor to an Iranian patient. Transplantation of all Afghan refugees in need and the absence of their use as kidney donors to Iranian patients proffer strong evidence against commercialism and a reason to believe that the Iran Model transplantation is practiced with ethical standards. In the last 2 years since the civil war has ended, returning these patients to Afghanistan has raised important ethical concerns. Repatriation of dialysis patients and transplant recipients may be tantamount to their deaths. It is expected that The Transplantation Society and the World Health Organization will establish links with the United Nations High Commissioner for Refugee Offices to provide humanitarian assistance to these patients.

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**A**FGHANISTAN is a war-stricken, low income country located in South Central Asia, neighboring Iran, Pakistan, Turkmenistan, Tajikistan, and Uzbekistan. It covers 652,100 square kilometers and has population of 28 million, including several million refugees living abroad. The majority of its inhabitants live below the national poverty line with a life expectancy of about 43 years.<sup>1</sup>

There have been 23 years of civil war in this country from 1978 to 2001. The war erupted with a coup by a Marxist-Leninist party in 1978, followed by a Russian occupation in 1979, and then the Mujahidin civil war, and finally the Taliban conquest. The war resulted in a continuous flow of refugees out of Afghanistan, due to mass arrests, torture, execution of dissidents, aerial bombardments, massacres, and burning of towns. Millions of Afghani were killed or wounded, millions were displaced inside their own country, including women and children. The number of Afghan refugees soon reached 5 million. The war was ended by U.S.-led military intervention against the Taliban after the September 11, 2001 attacks on

the World Trade Centers.<sup>2,3</sup> During the past 2–3 years, there has been voluntary repatriation of almost 3 million Afghan refugees from Pakistan and Iran.

Iran, as a bordering country, has hosted about 40% of all Afghan refugees in its eastern provinces and major urban centers. Only a small proportion of these refugees have resided in camps. The majority live outside the camps with opportunities to integrate locally, having access to the Iranian labor market. As a result, they have had access to a number of government services on an equal basis with Iranian nationals, such as dialysis and renal transplantation (RTx). The latter service is nonexistent in Afghanistan.<sup>4,5</sup>

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On the other hand, Iran<sup>1</sup> has a large-scale dialysis and a successful RTx program. In 1988, a compensated and well-controlled living unrelated donor (LURD) RTx program was adopted. Since 1999, the renal transplant waiting list of Iran has been eliminated. By the end of 2003, a total of 15,948 RTxs had been performed. The background, characteristics, results, and ethical issues of this program have been previously published.<sup>6-9</sup> In this program,<sup>10</sup> foreigners are not allowed to undergo RTx from an Iranian LURD. They also cannot volunteer as kidney donors to Iranian patients. But foreigners can receive transplants from a volunteer LURD of the same nationality as the recipient.

Because RTx has been performed in a number of Afghan refugees in Iran, this study was carried out to investigate the access of these refugees to Iranian RTx facilities as kidney donors and recipients and to evaluate related ethical issues.

## PATIENTS AND METHODS

The population of Afghan refugees remaining in Iran was taken from the United Nations High Commissioner for Refugees (UNHCR) statistics of June 2004. A questionnaire was sent to the end-stage renal diseases (ESRD) Office of Ministry of Health of Iran to provide the following information: the number of Afghan refugees on chronic dialysis in Iran, and the number of Afghan refugees who have undergone transplantation in Iran. The information included recipient name, sex, age, relation to the donor, date of RTx, name of transplantation center, and nationality of kidney donors. Information also was obtained from our own unit.

## RESULTS

In June 2004, there were about 1.6 million Afghan refugees in Iran (UNHCR estimate with recent registration). Two hundred forty-one refugees had ESRD (prevalence 150 pmp); 179 were on chronic hemodialysis and 62 underwent RTx. Among the 62 renal transplant recipients, 43 were male and 19 were female. Their age ranged from 15 to 79 years old. Nine patients received kidneys from living related donors (LRD), 1 from a spouse, 50 from an Afghani LURD, and 1 from a cadaveric kidney. The number of transplantations were 11, 16, and 17 cases in the years of 2001, 2002, and 2003, respectively. Nine refugees underwent RTx prior to 2001, and 9 others underwent transplantation in the first 6 months of 2004. No Afghani had donated a kidney to an Iranian patient.

The data from our single center showed that until July 2004, 1793 RTx have been performed, 11 of which were performed in Afghan refugees (8 men, 3 women; age range, 20–49 years): 4 kidneys from LRD, 1 from a spouse; and 6 from Afghani LURDs. All 11 transplant recipients were alive with functioning grafts. No Afghan refugee had been used as a donor for an Iranian patient.

## DISCUSSION

At present, more than 500,000 new ESRD patients die every year in developing countries due to lack of access to dialysis

and RTx facilities. Several hundred thousand dialysis patients also suffer worldwide due to the need for RTx. Iran has adopted a compensated LURD RTx program that has eliminated the renal transplant waiting list. In this program, many ethical problems related to LURD RTx have been prevented. According to 1 of our studies, the recipients of more than 50% of kidneys from LURD have been from the poor socioeconomic class, data that provides strong evidence against commercialism in the Iran Model of RTx program.<sup>10</sup>

Afghanistan is a low-income country. Afghan refugees are understandably among the poorest people in the world. The findings of the present study that no refugee has been used as kidney donor for an Iranian patient, but that all refugees who needed RTx underwent transplantation in Iran provides another reason to believe that RTx is practiced with ethical standards in the Iran Model RTx program.<sup>10</sup>

Another ethical issue is the repatriation of Afghan refugees who have ESRD. Because there is no hemodialysis facility in Afghanistan, repatriation of 179 refugees who are on chronic hemodialysis in Iran will be tantamount to their death. The 62 renal transplant recipients also should not be returned to their country. Due to the lack of skilled physicians medical facilities, and new immunosuppressive medications in Afghanistan, repatriation will result in many graft losses and patient deaths. At present, cyclosporine neoral and mycophenolate mofetil are provided at reduced prices to each refugee who has undergone transplantation in Iran. These medications will not be available or affordable if these recipients are returned home. A proposed solution is to change these medications to azathioprine and steroids. But this will also result in higher graft rejection and death rates and therefore, not be acceptable.

During the past 2–3 years since the civil war has ended in Afghanistan, both government authorities and the UNHCR Offices have worked to facilitate the voluntary repatriation of all refugees to their home country. All Afghan refugees not only should be returned to areas unaffected by insecurity, but all of those who have undergone transplantation in Iran should not be repatriated to areas with lack of needed medical facilities. All refugees who have valid reasons should be permitted to remain in Iran until a solution for their problem is found. It is proposed that the Transplantation Society and World Health Organization establish links with the UNHCR Offices for implementation of humanitarian assistance to these transplant recipients.

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